

## Certificate of Calibration

CANNON-FENSKE ROUTINE VISCOMETER			
Size <b>300</b>	Serial Number <b>H676</b>		
Temperature	Constant	Expanded Uncertainty* (k=2)	Kinematic Viscosity Range
°C	mm <sup>2</sup> /s <sup>2</sup> , (cSt/s)	%	mm <sup>2</sup> /s, (cSt)
40	0.2522	0.294	50 - 250
100	0.2511		

\* In alignment with the Calibration and Measurement Capabilities of National Metrology Institutes, the expressed uncertainty is relative to the viscosity of water, and therefore the uncertainty of the viscosity of water (ISO/TR 3666 (1998), 0.17%) is not taken into account.

### CALIBRATION DATA AT 40°C

Viscosity Standard	Kinematic Viscosity mm <sup>2</sup> /s, (cSt)	Efflux Time Seconds	Constant mm <sup>2</sup> /s <sup>2</sup> , (cSt/s)
I60	69.28	274.66	0.2522
I100	127.0	503.40	0.2522

Average = **0.2522**

### ADDITIONAL INFORMATION

Ambient Temperature (approximate) **22** °C      C<sub>0</sub> = **0.2526**      B = **77** x 10<sup>-6</sup>/°C  
 Charge (approximate) **6.4** ml      Driving fluid head (approximate) **8.8** cm      Working diameter of lower reservoir **3.0** cm

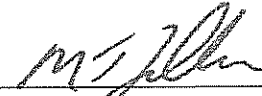
Kinematic viscosities of the standards used in calibrating were established in Master Viscometers as described in Ind. Eng. Chem. Anal. Ed. 16,708(1944), ASTM D 2162, and the Journal of Research of the National Bureau of Standards, Vol. 52, No. 3, March 1954, Research Paper 2479.

Kinematic viscosities are traceable to the viscosity of water, ISO 3666, at 20°C (ITS-90). Temperature measurements are traceable to NIST fixed-point calibration of SPRTs.

The gravitational constant, g, is 980.1 cm/sec<sup>2</sup> at the Cannon Instrument Company. The gravitational constant varies up to 0.1% in the United States. To make this small correction in the viscometer constant, multiply the above viscometer constant by the factor [g (at your laboratory) / 980.1].

Calibrated by **VSM** on 10/22/2012



under supervision of   
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